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A Daughter Not a Son as Predictor of Reggio Emilia Early Childhood Development Acceptance: Paradigm Shift in Households of Rural Areas in Northern Nigeria

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Abstract

Having daughters, not sons to predict accepting educational thought for children may be controversial in a patriarchal society, while in the actual sense is merit. This is so, as society first, perceived daughter and son from traditional gender ideology instead of the human capital view. Patriarchal society feels guilty when daughters turn out as determined, assertive, and competent than sons. This paper explores predictors of Reggio Emilia Early Childhood development (REA-ECD) acceptance, as a paradigm shift to educating daughters and sons equally in rural households' basis for gender development. A paradigm shift is a changing thought from a traditional belief to a reality of life in society. The paper draws analysis on collected data from 216 households in Binary Logistic Regression (BLR). It identified daughters as a predictor of high REA-ECD acceptance in rural northern Nigeria. The paper constructed a household background Models with the conclusion that breakthrough may be through curtailing traditional gender-based stratifications daughters instead of sons predicted RAE-ECD acceptance. Therefore, the patriarchal system may erode through gender development education, and future mothers might have increased in human capital quality. This may be easier with the provision of policies, studies, and indigenous knowledge and skills improvement.

Keywords: daughters, sons, acceptance, children education, rural households

Introduction

The early childhood development (ECD) is critical for sustainable and gender development of any country in the world. The ECD prepare children for school readiness, ability to be resilience, as it is one of the major determinants of individuals future success and societal development (Alizadeh et al., 2011; Fernandez, 2017; Fairani & Mariani, 2016; Gandini, 2011; Udenigwe, 2013; Ejie, 2006; Moss, 2006). The rural societies being the largest in the developing regions, the parents' acceptance of early childhood development for their daughters and sons in developing countries is essential (Aisha, 2016; Anne, 1998). Gendered early childhood development was proved successful in the developed global communities (Alizadeh et al., 2011; Fernandez, 2017; Fairani & Mariani, 2016; Gandini, 2011; Udenigwe, 2013; Ejie, 2006; Moss, 2006; Santín & Torruella, 2017). Reggio Emilia Approach (REA-ECD) is one of the major gendered ECD approaches used in the developed regions of Europe and American and appeared to be successful in other parts of the world including northern Nigeria with its acceptance by parents. The REA-ECD appeared as a notable conducive approach in which the

skills for gender development can be acquired by children in REA-ECD centres and schools (Pence & Ashton, 2015). Ironically for a long time in many rural areas of the developing countries and regions, this opportunity is neglected (Nupponen, 2005; Nura & Adamu, 2017; Meryem, 2018). Therefore, This study aims to explore and examines households' backgrounds variables to identify the predictors of parents acceptance on the enrolment of their daughters and sons in REA-ECD program.

Literature Review

The literature about the ECD phenomenon in rural areas despite its importance in healthy gender relationship and development is very scanty (Anna, 2010) as if there were no important acceptable number of human being therein. The work of literature about the phenomena of ECD, its approaches and practices are more common within the scope of urban context all over the world (Amali et al., 2016; Ejieh, 2006; Lella Gandini, 2011; Moss, 2006; Odiagbe, 2015; Salami et al., 2016; Udenigwe, 2013; UNESCO, 2007). The awareness about ECD and its impact on gender development among children by parents in rural areas need to be considered as important issues by both researchers and development partners (Amali et al., 2016; Sadker David et al., 2014; Ejieh, 2006; Moss, 2006; Udenigwe, 2013; UNESCO, 2007). This is necessary considering vital roles it plays in the individuals' life and societal development as well as nations building (Odiagbe, 2015; Gandini, 2011; Udenigwe, 2013). Importantly, there is a need to consider a large number of boys and girls population in rural areas globally (Jackie, 2006). The parents have roles to play on children right to education, and national development (UNESCO, 2007). The teaming children population in rural areas all over the world need to be considered with the ECD centres (Anna 2010; Rinaldi et al., n.d.; Nura and Adamu 2017; Salami, Childhood, and Unit 2016; Roberta 2000). From the literature, educating the children at an early age within the healthy gendered norms and values would ensure rapid and sustainable national development. Possibly, the appearance of REA-ECD and its subsequent acceptance by the parents of children with clear cutdown in gender discrimination may be what encouraged governments and development practitioners and partners to put and invest more efforts and resources (Miatta, 2017; UNECEF, 2015; UNESCO, 2019; UNESCO, 2007) in the development of the program.

This study in comparison to what is available in related literature explores and examines households' backgrounds variables and examine the parents' acceptance predictors on the enrolment of their daughters and sons in REA-ECD program. Furthermore, the study identifies and presents the remarkable predictors of high REA-ECD acceptance among the examined variables. The household backgrounds measured as the independent variable are studied by other scholars in various researches. Example, these variables were studied in the research of Adamu (2017) when reported variables on willingness to pay for conservation. The variables of household background in his study were statistically significant but mostly negative to a willingness to pay for conservation. There are also other studies reported the household background with mixed findings that make the studies on the household variable inconclusive. Adamu finding was consistent with (Surendran & Sekar, 2010). The number of children in households was also studied in a family profile by Zumilah (2010). In households, there was an important positive impact of a parent in the overall experience of the children (Zumilah, 2010) especially mothers. According to her, by implication as mothers in rural areas are facing household-motherhood conflict. They were left busy with childcare and thinking of their schooling, at the same time experiencing inadequate funds (Zumilah, 2010), for their daily needs.

Therefore, REA-ECD as gendered ECD program, in its nature seems to improves school readiness, schooling ability and resilience of both sexes of children as they are in collaboration with parents and teachers in the learning process. This is one of the best ways to determine the future educational success of children and the entire society in face of development (Alizadeh et al., 2011; Fernandez, 2017; Fairani & Mariani, 2016; Gandini, 2011; Udenigwe, 2013; Ejieh, 2006; Moss, 2006). The literature about this phenomenon in rural areas is very scanty (Anna, 2010) as if there were no important acceptable number of human being therein. The literature about REA-ECD phenomena, approaches and practices are not mostly common among scholars and writers on the rural context, however, the scope ECD mostly covered urban context all over the world (Amali et al., 2016; Ejieh, 2006; Lella Gandini, 2011; Moss, 2006; Odiagbe, 2015; Salami et al., 2016; Udenigwe, 2013;

UNESCO, 2007). The awareness of rural parents about REA-ECD impact on gender development need to be considered as important by both researchers and development practitioners (Amali et al., 2016; Sadker David et al., 2014; Ejieh, 2006; Moss, 2006; Udenigwe, 2013; UNESCO, 2007). This is because the rural areas with the largest number of children, the adults' acceptance of the REA-ECD program for children in this regard have greater roles on their education and gender development (UNESCO, 2007) process.

Relating parents with rural REA-ECD, especially women encouraged governments and development partners to invest more resources and efforts (Miatta, 2017; UNECEF, 2015; UNESCO, 2019; UNESCO, 2007). This is very cleared in Katsina state and other selected states in northern Nigeria for piloting REA-ECD program. As teaming children in rural areas were considered with this opportunity for development (Anna, 2010; Nura & Adamu, 2017; Salami et al., 2016), it imperative to investigate how parents considered and accepted the REA-ECD based on the sex of their children and their enrolment in the program as prompted by this study.

Theoretical Basis

This study was based and uses gender role theory by Lindsey and Mize (2001), which explain parents' expectations about their children roles (masculine and feminine), particularly the behaviours portrayed in the parents-child-learning roles. The theory underscores the importance of societal gender roles in this research. The study of Zumilah (2010) describes societal expectation from female and male parents, as being either a masculine or feminine. This foundation was due to the inclusion of gender analyses in identify predictor of REA-ECD acceptance between the daughters and sons among the variables of the study. This is because the theory ascribed that, one being certain sex does not mean he or she might have a self-assured way of living in their choice (Alvergne et al., 2007; Butler, 2004; Carter, 2014; Fasona, 2014; Jorge et al., 2017; Kretchmar, 2009; NECE, 2016; Sumita Parmar, 1996). This shows gender roles are controlled by both individuals but mostly by society (Butler, 2004; Christman & McClellan, 2012) Therefore, an individual must portrait independent identity to remain he or she within the societal culture (Carter, 2014).

The study also observes some difficulty to separate desired life of individual males and females from the life of a given society in which they are living (Cockerill, Chilton & Hutchinson, 2007; Cox & Heck, 1998; Dannhaeuser, 1993). This issue has perpetuated more in the life of rural society (Ijeoma, 2017). Probably, is due to their culture of rurality and rural poverty, gender favouritism and environmental atmosphere (Mader, 2013; Ismail, Masud & Zainalaludin, 2015; Gikonyo, Zainalaludin, & Masud, 2006). To speak on the gender roles boundary in some society seem very much strange. In some parts of Asia like Malaysia, this is becoming less strange when realizes that, these social norms were constituted and hold as desired but were not originated in the individual personhood. (Zakiah et al., 2015). This may be part of the traditional gender roles as expressed in (Aisha & Yahuza, 2018; Butler, 2004; Ibrahim et al., 2015; Zumilah, 2010) that, men were assumed and considered strong, hardworking, and intelligent in control of the environment. In most rural areas their environments include women, children and all their activities within and outside the home (Abbas & Bukar, 2017; Abdullahi et al., 2013; Amina, 2015). Yakubu (2017) has reported confirming that, women expectations in most rural society were nurturing children, and caring roles at home and beyond (Zumilah, 2010). However, it is an irony that women nurtured and cared for children and others (UNICEF, 2018), but the men are in control of resource and decisions making (Ibrahim, 2014).

The societies in rural areas of northern Nigeria have their conservative nature and rigidity about the two-child sex. The rural societies' conservative nature was described by (Zumilah, 2010) as very hard to change. For example, in rural areas of Katsina, there is a historic problem on the acceptance to enrol and send children, particularly girls into formal school system (Abdullahi & Maiunguwa, 2014; Abdullahi, Zainalaludin & Paim, 2013; Garba, 2017; Ibrahim, 2014; Mohammed, Nggada & Abdullahi, 2013; Wycliff, 2014). This is because the rural people of Katsina state for long believed that, western education is an immorality gateway (Wycliff, 2014; Mohammed, Nggada & Abdullahi, 2013; Garba, 2017; Odiagbe, 2015). Furthermore, the children right to education was left in the hands

of their parents, no functional constituted laws that enforced parents to educate children (Abdullahi et al., 2013; Garba, 2017; Ibrahim, 2014; Mohammed et al., 2013; Wycliff, 2014). Therefore, with the acceptance of the REA-ECD, this study aims to explore daughters and sons among the predictor variables of the REA-ECD acceptance among rural households in Katsina state northern Nigeria.

Methods

The research design in this study was exploratory correlation as suggested by (Conboy et al., 2012; Gliner et al., 2011; Navarro, Sada & Maldonado, 2007; Cohen, Manion & Morrison, 2007). The design was used in the type of research methods in which the hypothesis of the research was to be tested based on the existing theories (Hair, et al., 2010). Conboy et al. (2012), have also established that this type of research design is commonly used when involved collecting and analysing numerical data. A combine research design could be used to achieve an objective in research (Fraenkel, Wallen, and Hyun 2011). This justified the use of the exploratory-correlation design in this study. Also, the design is appropriate as it allows gathering data from a large sample and remote destinations that allow the generalization of the finding to a larger population of the study (Creswell & Clark 2017). The identified and defined population of a study is what (Hashim, 2010; Banerjee & Chaudhury, 2010) refers to as “target population” of the study. Therefore, the target population of this study were parents of children in rural areas of northern Nigeria where there are established REA-ECD centres. The population of this study is specifically those parents who agree with and accepted to enrol their children in REA-ECD program centres in Katsina state. Therefore, these parents are residing, in remote and various rural areas where they born and brought up their children, who they agree and accepted to enrol their children in REA-ECD program centres, they were considered as the population of this study.

Population of Study

These populations were distributed within various localities across the 34 local government areas (LGAs) in the three senatorial zones of Katsina state. The design used is appropriate as it allows gathering data from a large sample and remote destinations. This also allows the generalization of the finding to a larger population of the study. One common characteristic of exploratory-correlational research design is to choose a sample from a large population like in this study and generalization of the finding (Creswell & Clark, 2017). Other past studies used exploratory-correlational design in studying similar factors in technology acceptance and explore the relationship between several variables in their studies (Al-Sayyed & Abdalhaq, 2016; Alharbi & Drew, 2014; Alto et al., 2018; Dermont et al., 2017; Komendantova & Battaglini, 2016; Lim & Ting, 2012; Liu, 2014; Wersebe et al., 2017). Therefore, this study found exploratory-correlational research design on the population as the most appropriate to achieve the objectives (Abu-Dalbouh, 2013). Also, the scoping study was conducted earlier to gather supportive evidence and confirming the status of this new and the not well-researched phenomena REA-ECD in developing region of Africa under study (Suzana et al., 2012). It normally helps to explain as planned the proposed researches or suggest other elements toward solving the identified issues. Scoping study provides additional information from individual opinions about the subject under the study (Arthur, 2018). As earlier stated, the REA-ECD is a new program, launched in 2015, the information about its acceptance and success is still not adequate. Therefore, scoping study as a popular approach in understanding the research context was used in this context besides the review (Wallang 2018; Abdu, Hashim & Asnarulkhadi, 2014).

Sampling Procedure

Throughout the sampling process, random selections were used. Firstly, the central senatorial zone with the eleven (11) LGAs, was randomly selected, and later, six (6) LGAs out of these were also randomly selected based on zoning. The total population of 48, 479 from the selected villages with REA-ECD centres in the selected LGAs were identified. The random selection of Katsina central and subsequent selection of six LGAs was based on two reasons. Firstly, unique and uniformity of the population characters (Fraenkel, Wallen & Hyun, 2011), throughout the Katsina state. Secondly,

conducted based on zoning (Gliner, Morgan & Leech, 2011), using the zonal education directories of the senatorial zones in Katsina state. From these populations, the accurate study sample size was determined. In drawing the sample size in a study, Banerjee and Chaudhury (2010) dan Bekker-Grob et al. (2015) suggestions were considered. Their view was stressed by Fraenkel et al. (2011) that to determine sample size, researchers must refer to the established tables and formulas as in (Creswell & Clark, 2007; Fraenkel et al., 2011). The sample size of this study determined after considering the established tables of Krejcie and Morgan (1970), Yamane (1967) and Cochran (1977) sampling techniques as in Table 1 below. There are 381-394 samples required based on considered tables in this study. However, 432 samples of 50:50 female and male parents from 216 households were considered, including an additional 11 per cent margin error in the samples. Table 1 below presents the required sample size determinants considered in the sampling procedure.

Table1: Required Samples Size Determinants

Sample, Sizes Determinants	Population Size	Required Samples Size
Yamane Table	25,000-49,999	394
Krejcie & Morgan Table	40,000-49,999	388
Cochran s formula	50% (p=0.5) max variability	384
Cochran formula	a finite population of 48,479	381
Considered Samples	In this study	432

The random procedure conducted both in selection central senatorial zone and the six LGAs in this study were pen and paper all through. This involves writing names, wrap, mixed and shaken up than invite the neutral persons to pick up (Creswell & Clark, 2017; Yamane, 1967; Cochran, 1977; Krejcie & Morgan, 1970; Hashim, 2010). This was done in such a way that all were given an equal chance to be selected in the sample and eliminate any forms of bias. The sample size determination is an important step that leads to the selection of respondents. In selecting respondents, systematic sampling technique was employed using the list of parents via their children register obtained from the REA-ECD centres. The sampling processes up to selection respondents was termed as 'multistage systematic random sampling techniques'. The area coverage of the research and volume of data collected suggested multistage sampling technique (Ary et al., 2006; Creswell & Clark, 2007; Fine, Torre, Boudin, Bowen, Clark, Hylton, Martinez, Roberts, Smart, Upegui, 2003). As recommended by Fraenkel et al. (2011), that, "the participants in systematic random sampling procedure are selected from a list of the population in the manner that every nth is selected. The criteria were used on the list of all parents in the sampled villages with REA-ECD centres. In each of the 6-selected LGAs, there are 36 households selected based on systematic random sampling techniques. This makes a total of 216 households from sampled villages of this study.

Data Collection and Analyses Procedure

This study is quantitative, therefore, used a fully structured questionnaire for data collection. The instrument used was prepared through adaption from existing instruments. The instruments consist of three major parts; the first part was respondents' backgrounds, second part; households' backgrounds, and third part; REA-ECD acceptance domains. A total of 432 of the instruments were administered to the respondents through the trained enumerators. The data collection were including use of face-to-face questioning the respondents and completing the questionnaires. This was due to the nature of rural areas, where not all or everyone can read and write in filling the questionnaire appropriately. This is part of the training the enumerators were given, for strictly adhered to the guidelines of the data collection. The principal researcher was moving from one area to another to monitor the conduct of data collection daily. This helps to ensure that, the enumerators have adhered to guidelines and provided the needed support to both enumerators and respondents were necessary.

From the total questionnaires administered and filled throughout the survey, 405 valid were used in analyses. These were after treatment of outliers and missing value cases. In keeping to the aim of this study, after all, preliminary descriptive analysis of the data, inferential analyses were conducted. Binary Logistic Regression (BLR) was used to determine the likelihood of each of the household

background variables in predicting high REA-ECD acceptance. Finally, predictors of the likelihood of high REA-ECD acceptance were identified. However, multicollinearity test among independent variables of the model was performed through a correlation matrix. This allows looking at the high correlation between independent variables (usually 0.50 and above), as such one of the highly correlated variables was dropped before the Model analysis. The BLR was chosen due to dependent variable was made dichotomous; high REA-ECD acceptance=1 (Khandoker et al., 2017; Copas, 1983; Altman & Andersen, 1989; Derksen & Keselman, 1992; Huguette et al., 2017). BLR choice was also due to independent variables were on different measurements. BLR measures independent variables of whatever measurement to predict the likelihood of an event (Snow David et al., 1986; Khandoker et al., 2017). In this paper, 5-type of statistics were considered for decision making on BLR results. The Omnibus Test of Model Coefficients, Hosmer and Lemeshow test of goodness of fit, Wald Chi-Square statistics, Logistic Regression Coefficient (B) and Log odds or Exp (B) (Altman & Andersen, 1989; Hair et al., 2010; Copas, 1983; Derksen & Keselman, 1992; Hamdollah & Baghaei, 2016; Lichstein, 2007).

This explained and considered the use of logistic regression models in this study because it is interesting to know how much variance in the dependent variable (DV) was explained by each component of independent variables in the Models (Copas, 1983; Derksen & Keselman, 1992; Hair, Anderson, et al., 2010). Therefore, these are often preferable measurement to report in BLR. The variables in the model have accepted the BLR test, based on the model, the BLR equation for the model is as follows:

$$Z_n = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots + B_kX_k$$

Note:

- z is the logit and also called the log odds of the dependent variable
- n is the number of Models from 1-4
- B_0 is the constant
- there are k independent variables
- the “ B ” terms as the logistic regression coefficient, or parameter estimates
- Exp (B) is the odds ratio for each IV. The odds ratio is the factor by which the IVs increases or decreases the log odds of the DV

Findings

The BLR statistics obtained $p \leq 0.05$ in Omnibus Test of Model Coefficient. This indicates that the Model is significant to explain the likelihood of high REA-ECD acceptance. Hosmer and Lemeshow test of goodness of fit statistic at $p > 0.05$, indicates the predictor variables in the Model were linearly related to log odds of high REA-ECD acceptance. This also showed the Model variables were sufficient and fit to predicts the likelihood of high REA-ECD acceptance. The model was constructed as a Household Background Model (HBM), comprising nine (9) main variables. The variables are years in marriage, education level, a secondary source of income, household size, household income, presence of sons, presence of daughters, school type and age of school entry. From these variables, three are on scales data while the remaining are on categorical data. This makes the Model have a total of nineteen (19) variable components. Ten variable components were significantly ($p < 0.05$) predicted high REA-ECD acceptance in the Model. Therefore, it was concluded that HBM was significant to predict the likelihood of high REA-ECD acceptance. Hence, HBM rejected H_0 , that there exist no households' background variables predicted the likelihood of high REA-ECD acceptance. The below was an equation of the Model.

$$Z_2 = -0.809 + 1.049 + 0.787 + 2.522 - 0.215 + 1.181 + 0.937 + 0.697 + 0.454 - 0.886 - 1.391 + 0.105 + 0.001 + 0.687 + 1.692 + 1.941 - 0.164 - 0.796 - 1.029 - 0.657$$

Equation: Households Background Model

The paper reported all ten significant variables components; however, the main discussion was focus only on the presence of daughters as a predictor of high REA-ECD acceptance in HBM. The significant variables were included eight (8) as categorical, that are *primary, secondary and tertiary education levels, presence of daughters, animal husbandry, processed food business and a secondary source of income as well as 4-years and 5-years school entry age*. The scale variables were the *number of years in marriage and household monthly income* as all presented in the Model Table 2 below.

Table 2: Wald Chi-Square Statistics of Model; Dependent Variable=1

Household Background Model (HBM) n=216	B	S.E.	Wald	d.f.	Sig.	Exp(B)
HOHPE	1.049	0.558	3.538	1	0.050	2.567
HOHSE	0.787	0.470	2.811	1	0.049	2.861
HOHTE	2.522	1.144	4.862	1	0.027	12.450
HOHYM	-0.215	.049	19.531	1	0.000	0.806
HOHPT	1.181	0.581	4.131	1	0.042	3.258
HOHAG	0.937	0.574	2.667	1	0.102	2.552
HOHPS	0.697	1.53	0.207	1	0.649	2.007
HOHAS	0.454	1.513	0.07	1	0.792	1.491
HOHAH	-0.886	0.399	4.946	1	0.026	0.412
HOHFP	-1.391	0.492	8.000	1	0.005	0.249
HOHSZ	0.105	0.125	0.697	1	0.404	1.110
HOHMI	0.001	0.000	8.462	1	0.004	1.000
HOH3Y	0.687	0.467	2.168	1	0.141	1.988
HOH4Y	1.692	0.661	6.561	1	0.010	5.431
HOH5Y	1.941	0.477	16.586	1	0.000	6.963
HOH6Y	-0.164	0.518	0.101	1	0.751	0.848
HOHRE	-0.796	1.199	0.44	1	0.507	0.451
HOHPR	-1.029	1.208	0.725	1	0.394	0.357
HOHISL	-0.657	1.237	0.282	1	0.595	0.518
CONSTANT	-0.809	2.15	0.142	1	0.707	0.445

Notes The **bolded** variables of the model were significant predictors.

HOHPE= Pri. Educ. level
HOHSE= Sec. Educ. level
HOHTE= Tertiary Educ. level
HOHYM= Years in marriage
HOHPT= Present of daughters
HOHAD= Above-two Daughters
HOHPS= Present of Son
HOHAS= Above-two Son
HOHAH= Animal Husbandry
HOHFP= Food Processing
HOHSZ= Household size
HOHMI= Monthly income
HOH3Y= 3-Year School entry
HOH4Y= 4-Year School entry
HOH5Y= 5-Years School entry
HOH6Y= 6-Year Sch entry
HOHRE= Reggio Emilia Center
HOHPR= Primary School
HOHISL= Islamic School

The education levels significantly predicted the likelihood of high REA-ECD acceptance, in Wald Chi-Square statistic of the Model. Compared to households with primary education level, the household with a tertiary level of education had 12.5 times (odds=12.45) more likelihood of high

REA-ECD acceptance. By implication, this result means the households with parents who attended tertiary education level would have 12.5 times more likely for high REA-ECD acceptance.

The Model had presented the unique interesting finding which shows the presence of daughters in households significantly predicted the likelihood of high REA-ECD acceptance. The Wald Chi-Square statistic on the presence of daughters was $p < 0.05$ in the Model. The presence of daughters in the household had 2.26 times (odds=3.258) more likelihood of high REA-ECD acceptance. Though, information about children was representing the entire family and or household. However, it was surprising that the presence of a daughter or two in a rural household will improve the likelihood of high REA-ECD acceptance. This implies that having a daughter or two in family increase the chances of high REA-ECD acceptance by their parents. The age of school entry was also significantly predicted the likelihood of high REA-ECD acceptance in the Wald Chi-Square statistic in HBM. In comparing to three-year school entry, five-year school entry age had 6.0 times (odds=6.963) more likelihood of high REA-ECD acceptance among the households. Four-year school entry compared to three-year school entry had 4.4 times (odds=5.43) more likelihood of high REA-ECD acceptance. However, household's monthly income significantly predicted the likelihood of high REA-ECD acceptance, in the same way, as it predicted the likelihood of low REA-ECD acceptance (odds=1.000).

On the other hand, the animal husbandry and processed food business as the components of households' secondary sources of income significantly predicted less likelihood of REA-ECD acceptance. Animal husbandry had reduced the likelihood of high REA-ECD acceptance by 59 percent with (odds=0.412 with negative *B*). Furthermore, the processed food business had reduced the likelihood of high REA-ECD acceptance by 75 percent (odds=0.249 with negative *B*). The number of years in marriage has also significantly predicted the less likelihood of high REA-ECD acceptance. Years in marriage had reduces the likelihood of high REA-ECD acceptance by 19 percent (odds=0.81 negative *B*). However, remaining variables in the model were not significant in predicting the likelihood of high REA-ECD acceptance as depicted in the Model table above.

Discussion

The most exceptional outcome from the Model of this study was having a daughter or two, which was appeared important in high REA-ECD acceptance. The finding was the fulcrum of this study and it can be a baseline of its periodical conduct within the rural communities. This would support the current global trends seeking to remove any gender barriers and shift the mindset from gender equality to gender equity. The target is to leave gender equality to focus on providing men and women with the same and equal opportunities in the legal frameworks. However, gender equity should work to correct the historical harms that have left women behind through societal restrictions on various opportunities including education. Gender equity may also provide women with the tools to succeed through such education program that offers them conditional cash transfers. The strong focus on gender equity may on short term bridges the inequality gaps by the provision of laws and policies on gender-focused programs that not only level the playing ground but also work to change the cultural setting as well as give more supports to women and girls to be educated. This cultural shift requires efforts from all leaders and individual community members. Therefore, the paradigm shift to understand the differences between gender equity and equality is essential in providing supports to girls and women. This is not just by offering them the same opportunities with men but recognizing the lingering barriers that prevent those opportunities from becoming a reality for countless females.

Having a daughter or two in this study is an imperative finding though, it may seem a controversial issue to the conservative individuals, but it is as well merit to the development community. Although rural areas of the northern state area total patriarchal society with 100% controlled by males. The patriarchal way of life in rural society was described by Zumilah (2010) look as it reduces the quality of sons' human capital in rural Malaysia. In such a society where the human capital quality of sons was reduced, the traditional gender perspective may view the human capital of daughters on the other hand, in total dangerous position. This is because the sons in a patriarchal system have the choice of increasing their human capital quality (Shirin & Kihara, 2013), through academic achievement

(Abdullahi et al., 2013; Zumilah, 2010). However, the traditional gender ideology perspective of rural parents and larger society constrained daughters from having such a choice. From this perspective, the ideology of both parents and larger society particularly in rural areas contributed to the debate on less importance of daughters' education. The issue may have similarity but differs from what (Zumilah, 2010) discovered on having "sons as an issue" in Malaysian rural society. Her finding indicates that having sons is a problem to rural enterprise development among rural Malay family.

However, historically rural parents and society at large in northern Nigeria view daughters as helpers in the households chores (Aisha, 2016). Also, others view daughters as an additional burden in households and not like sons, the daughters at one time will marry to another household but leaving out some responsibility of her with her family. Their notion was that the daughter at all time need support from her family, even when she was finally married out to another family (Ibrahim, 2014). This type of situation can negatively affect females and girls' education in such a society, except a certain intervention, were made. This is because females' education though with intervening influences not only future education, next girls generation but the entire society (Abdullahi et al., 2013; Aisha, 2016; Aisha & Yahuza, 2018). However, most parents including the females were wishing to have sons especially firstborn who will be ambitious and can provide some supports to the family. The parents also believe that daughters are not future responsible for general supports of the family as their sons do. The said finding from this study contradicted this notion that traces its based on traditional gender ideology. However, was supported being in line with (Roe & Morris, 2004) on capabilities of women in the alternative model of responsibility in the supports of family. Unfortunately, these works discovered that most services established to support and protect families have been problematic, contradictory and unhelpful for mothers and daughters.

The presence of daughters in this study is an added advantage in households being a significant predictor of the likelihood of high REA-ECD acceptance. This is because the program as a support service empowers more female parents with employment opportunity. Thus, in the long term, would facilitate not only the development of the rural family but also the larger society and nation at large. This finding may be linked to the current intervention of girls' education empowerment program (GEEP) in the study area, in which most female parents acquire Nation Certificate in Education (NCE) as high educational qualification. The daughters being with their educated mothers even in the case of divorce or fathers' death (Abdullahi et al., 2013; Aisha, 2016; Ibrahim, 2014; Sarki, 2015), will continue schooling under their mother's supports. Although, in general, females keep struggle with equality like in the issues of wages gap. This is because patriarchy is a never-ending fight rooted in the name of everyone should stay in the area they are expected. However, in the society of today, females in most parts of the world have access to education and jobs though not like their male counterparts. These waves will gradually be annexed even in the rural areas, were some females parents are coming up so far (Broadband Commission Working Group on the Digital Gender Divide, 2017). This is a new gender paradigm shift and conversation for most males that their stereotypes are becoming more common for females and accepted in society. This might not be unconnected to the presence of daughters as a predictor of the likelihood of high REA-ECD acceptance instead of sons' presence. Another reason that may highlight this finding was being daughters more transformational in leadership style (Zainalaludin, Jamaluddin & Abd Shukor, 2017), and more relationship-oriented in the management (Zumilah, 2010). While the sons mostly portray the opposite, they are growth-oriented, reckless in opportunity and wild in taking power and leadership (Zainalaludin, Jamaluddin & Abd Shukor, 2017) from their male parents.

In the rural area of Hausa land of northern Nigeria, this finding may seem in controversies as a new gender paradigm shift. This study observes some female-headed households also a new gender paradigm shift in the Hausa land region, as it is not common after death or divorce, for a woman to stay alone with her children (Abdullahi 2013). However, this issue might not be unconnected with the presence of the mass killing of rural males by bandits and gangsters and leaving females as widows with several children (Audu, Yahya & Bassi, 2006; Olotuah & Olotuah, 2016; Izugbara & Ezech, 2010; Munro et al., 2011; Pierce, 2007; Sarki, 2015). What was usually known, the children and female parents in the event of death or divorce will remain under the custody of fathers' family or relatives

(Sarki, 2015). This is generally obvious as there were concerns and generosity over females and children especially daughters by society for the lost their husbands and parents.

Conclusion and Implication

Conclusion of this paper was that, having daughters not sons among rural households as a significant predictor of high REA-ECD acceptance portrayed a greater breakthrough. It is a revolutionary process in curtailing traditional gender role cluster and social gender-based stratification which rooted in the life of rural society. This was very clear by indicating the daughters instead of sons as a predictor of the likelihood of high RAE-ECD acceptance which involved the future generation education. This also indicates that the traditional gender roles ideology can gradually change if the practices of the patriarchal system were kept corroding and rusting. The gender and development efforts particularly, through education and further researches, may positively increase the human capital quality of future mothers and daughters. This was very possible when policies and more studies were embedded in continuous. Improving gendered education and indiscrimination in indigenous knowledge and skills as well as entrepreneurial skills such as that of cooking, handcrafting, and weaving among all children will be very vital. This may also improve the households' family democratic setting and attendance to the tertiary level of education. The system would change to become more rational in decision making, more democratic in the household and the society at large. These may also result in the acceptance of new ideas, practices, programs and systems for gendered sustainable development. The study was limited to a single culture of rural northern Nigeria, more studies with a similar variable need to be conducted using a multicultural perspective. A longitudinal study in future is required to ascertain the existence of the development over time.

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